I. **TITLE:**

Advanced Greenhouse Production

II. **CATALOG DESCRIPTION:**

A study of the production of plants in the greenhouse with an emphasis on the effect of the environment on plant growth and development. Considerable attention will be given to production schedules for important greenhouse crops.

III. **PURPOSE:**

The purpose of this course is to make the student knowledgeable of how commercial greenhouse crops are produced for wholesale and retail sale.

IV. **COURSE OBJECTIVES:**

A. To develop an understanding of how environmental conditions can be manipulated to produce quality greenhouse plants.
B. To explore the use of automated mechanisms in a greenhouse environment.
C. To learn the process of crop scheduling in a commercial greenhouse.
D. To learn and practice the requirements of producing greenhouse crops.

V. **CONTENT OUTLINE:**

A. The greenhouse environment
B. Greenhouse environmental controls
C. Effects of cultural practices on greenhouse crops.
D. Commercial production of greenhouse plants.

VI. **INSTRUCTIONAL ACTIVITIES:**

A. Lectures
B. Demonstrations
C. Laboratory Exercises
D. Field trips
VII. **FIELD AND CLINICAL EXPERIENCES:**

Students will plan and grow different greenhouse crops in the University greenhouse range. They will also be able to study the response of a variety of greenhouse plants to various cultural treatments.

VIII. **RESOURCES:**

A. Greenhouse and laboratory facilities  
B. Greenhouse plant materials  
C. Area commercial greenhouses

IX. **GRADING PROCEDURES:**

Class attendance will account for 10% of the grade, weekly work hours (36%), weekly bench evaluations (20%), educations units will be 5% each (chemicals, watering, fertilizers, and controllers) with plugs being worth 6%, public sales (5%) and greenhouse innovation (3%).

Grading Scale:  
90 - 100 = A  
80 - 89 = B  
70 - 79 = C  
60 - 69 = D  
Below 60 = E  

Make-up policy: Unit quizzes must be made up within one week of the originally scheduled time. This time limit will only be waived in unusual circumstances. Written reports must be received on time in order for the student to receive full credit. **Late work will be lowered by 10% each week it is delinquent.** Work will NOT be accepted after two weeks past the due date.

X. **ATTENDANCE POLICY:**

Please refer to the most current copy of the *Murray State University’s Undergraduate Bulletin.*

XI. **ACADEMIC HONESTY POLICY:**

(Adopted by the MSU Board of Regents)  
Cheating, plagiarism (submitting another person’s material as one’s own), or doing work for another person which will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the
unauthorized copying of examinations, assignments, reports, term papers, or the presentation on unacknowledged material as if it were the student’s own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current Undergraduate Bulletin. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student’s responsibility to obtain and read a copy of this document. The School’s Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty member or the Secretary.

XII. TEXT AND REFERENCES:

No required text

XIII. PREREQUISITES:

AGR 360 and AGR 361 or permission from the instructor and graduate standing.

XIV. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270-809-3361 (TDD).

XV. SCHOOL OF AGRICULTURE CELL PHONE POLICY:

The School of Agriculture recognizes that in today’s world cell phones are a familiar and often necessary form of communication for students.

It shall be the policy of the School that no cell phone usage shall be allowed in class and/or labs without the prior consent of the course instructor. This shall include verbal calling, incoming calls, email, text messaging, and use of cell phone calculators on tests and quizzes.
Cell phones must be kept off and out of sight (i.e. secured to a person’s belt or kept in a bag or purse away from desks and lab counters). Should a student’s cell phone be visible, ring, or other form of unauthorized usage that is interruptive to the class or lab, the student may be asked to leave class and not return for that class/lab period.

Upon prior consent of the instructor, a student may obtain permission to have their phone on in case of an emergency or in critical family situations.

This policy also includes pagers and other electronic equipment such as smartphones and/or computers/laptops.